Erratum

Corrigendum to "Numerical simulation and experimental validation of solids flows in a bubbling fluidized bed" [Powder Technology, 103 (1999) 117–129]☆

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The author regrets that Eqs. (4) and (17b) appeared incorrectly in the above article.

The correct equations are published below.

Solids-phase momentum equation

$$\frac{\partial}{\partial t}\left(\varepsilon_s \rho_s \vec{v}_s\right) + \nabla\cdot\left(\varepsilon_s \rho_s \vec{v}_s \vec{v}_s\right) = -\nabla\cdot\left(p_s \bar{\bar{I}}\right) + \varepsilon_s \rho_s \vec{g} + \nabla\cdot\left(\bar{\bar{\tau}}_s\right) + \beta_{sg}\left(\vec{v}_g - \vec{v}_s\right). \quad (4)$$

There are two minor typographical errors in Eq. (17b) which should read:

$$\left(\overline{\varepsilon_n \rho_n v_n}\right)^n_{i,j+\frac{1}{2},k} = \left(\varepsilon_n \rho_n v_n\right)^n_{i,j+\frac{1}{2},k} - \frac{\delta t}{\delta x_i} < \left(\varepsilon_n \rho_n v_n\right) u_n >_{i,j+\frac{1}{2},k} - \frac{\delta t}{\delta y_j} < \left(\varepsilon_n \rho_n v_n\right) v_n >_{i,j+\frac{1}{2},k} - \frac{\delta t}{\delta z_k} < \left(\varepsilon_n \rho_n v_n\right) w_n >_{i,j+\frac{1}{2},k} + \delta t \varepsilon_n \rho_n g_y + \delta t\left(\nabla \tau_{ny}\right)^n_{i,j+\frac{1}{2},k}. \quad (17b)$$

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